Steps taken to meet the demand in the country, *inter-alia*, include opening of new mines, modernisation of existing mines, application of new technology, ensuring timely availability of inputs and infrastructural facilities, better capacity utilisation and maintaining good industrial relations.

In addition, Coal Mines (Nationalisation) Act, 1973 has been amended to allow private sector participation in coal mining. This amendment enables companies engaged in power generation, and such other end uses as may be notified by Govt. from time to time, to carry out coal mining. This is in addition to the existing provision enabling companies engaged in the production of iron and steel to carry out coal mining.

Average cost and time overrun for projects in coal sector

5819. DR. B.B. DUTTA: Will the Minister of COAL be pleased to state:

(a) the average cost overrun per project and the time overrun per project in the coal sector during the Sixth, the Seventh and Eighth Five Year Plan;

(b) reasons for higher cost overrun and time overrun per project; and

(c) steps taken by Government to improve the situation?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA): (a) Average cost overrun per project and time overrun per project in the coal sector in respect of projects each costing Rs. 20.0 crores and above completed during Sixth, Seventh and Eighth Five Year Plan period (till March, 1995) are given below:—

	Average cost overrun per project (Rs. crores)		Average time overrun per project (Years)	
	As per original sanction	As per revised sanction	As per original sanction	As per revised sanction
Sixth Plan (1980-85)	1.75	—	—	—
Seventh Plan (1985-90)	26.31	0.49	2.00	0.90
Annual Plans (1990-92)	21.82	—	2.55	0.77
Eighth Plan (1992-97) Upto March, 1995.	25.05	—	2.72	0.94

(b) and (c) Main reasons for time overrun of projects in coal sector are delay in acquisition of land and associated rehabilitation problems, adverse geo-mining conditions, delay in supply of equipment and turn-key execution and fund constraints. Factors leading to cost overrun of projects are the normal inflation during the period of construction as the capital cost of a project is estimated on the price level prevailing at the time of sanction, increase of statutory levies and exchange rate variation. The time overrun of projects further adds to cost overrun. Steps taken to contain time overrun of projects are as follows:—

(i) For projects costing more than Rs. 50 crores, 'Advance Action' upto an amount of Rs. 10 crores is sanctioned for undertaking essential initial activities like land acquisition and related rehabilitation of land oustees, forestry and environmental

clearances, surveys for railway line, roads, power supply etc.

(ii) Comprehensive guidelies for project formulation and monitoring have been issue by the Ministry of Coal and the system of monitoring of projects at various levels has been standardised.

(iii) Rugular review meetings with public sector equipment manufacturers/suppliers are held.

(iv) Sophisticated geological and geophysical exploration techniques and interpretation mechanism are being progressively introduced for accurate forecasting of geo-mining conditions.

(v) For providing adequate funds for the on-going projects, coal companies have taken steps to mobilise resources through internal generation as well as external borrowings.

Share of underground and open cast mines in production of coal

5820. DR. B.B. DUTTA: Will the Minister of COAL be pleased to state:

(a) what is the share of underground and open cast mines in the production of coal at the end of each Five Year Plan and at the beginning of the Eighth Five Yea Plan;

(b) what are the reasons for low contribution of underground mines in total coal production; and

(c) steps taken to increase the production of coal from underground mines?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI AJIT KUMAR PANJA): (a) Coal production in Coal India Limited (CIL) and Singareni Collieries Company Limted (SCCL) taken together, at the end of each Five Year Plan after nationalisation of coal industry and at the beginning of the Eighth Five Year Plan were as under:

	(in million tonnes) Coal Production		
	Under-ground	Open-cast	Total
End of 4th Five Year Plan (74-75)	64.40	20.77	85.17
End of 5th Five Year Plan (79-80)	68.32	32.52	101.04
End of 6th Five Year Plan (84-85)	71.05	72.10	143.15
End of 7th Five Year Plan (89-90)	70.73	125.69	196.42
Intermediate periods			
(90-91)	66.96	140.38	207.34
(91-92)	68.98	155.74	224.72
Beginning of 8th Five Year Plan (92-93)	70.37	163.36	233.73

(b) Most of the underground mines are old, extensive and worked manually. Many underground mines are having geomining problems like steep and multiple seams, occurance of fires and water logged old workings in the adjoining areas etc. leading to low contributions from these mines.